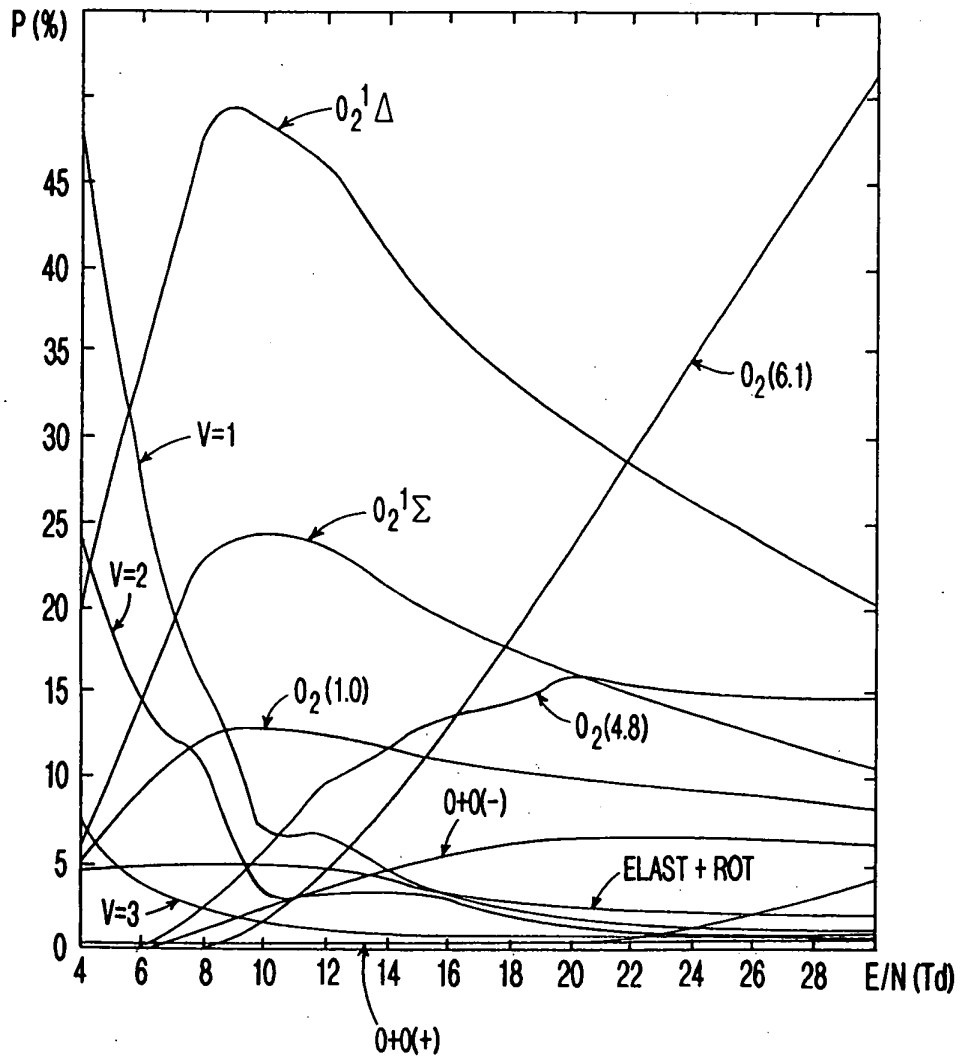


FIG-1

REACTIONS AT 10 Td

	6.5%	$O_2 + e^- \rightarrow$	O_2 (v=1) + e^-
	3%	$O_2 + e^- \rightarrow$	O_2 (v=2) + e^-
	2%	$O_2 + e^- \rightarrow$	O_2 (v=3) + e^-
$O_2{}^1\Delta$	48.5%	$O_2 + e^- \rightarrow$	O_2 (0.98) + e^-
	~13%	$O_2 + e^- \rightarrow$	O_2 (1.0) + e^-
$O_2{}^1\Sigma$	~24.5%	$O_2 + e^- \rightarrow$	O_2 (1.63) + e^-
	6%	$O_2 + e^- \rightarrow$	O_2 (4.8) + e^-
	2%	$O_2 + e^- \rightarrow$	O_2 (6.1) + e^-
		$O_2 + e^- \rightarrow$	O_2 (8.4) + e^-
	~ 2%	$O_2 + e^- \rightarrow$	$O + O^-$
	~1%	$O_2 + e^- \rightarrow$	$O + O(+) + e^-$
		$O_2 + e^- \rightarrow$	$O_2 + e^- + e^-$
	5%	ELASTIC + ROTATIONAL	

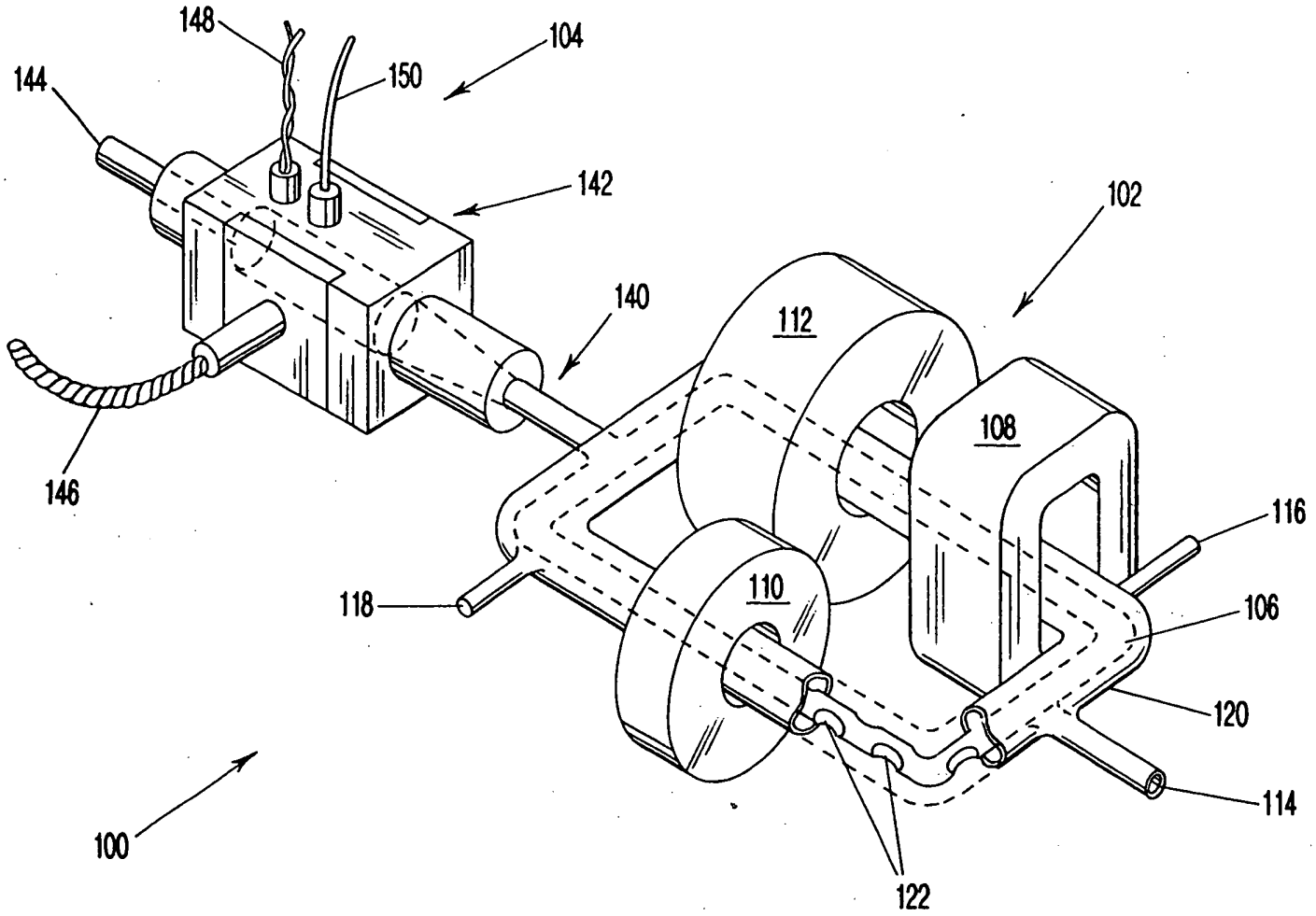

148
104
144
150
142
102
140
112
108
146
116
118
110
106
120
114
100
122

FIG-2

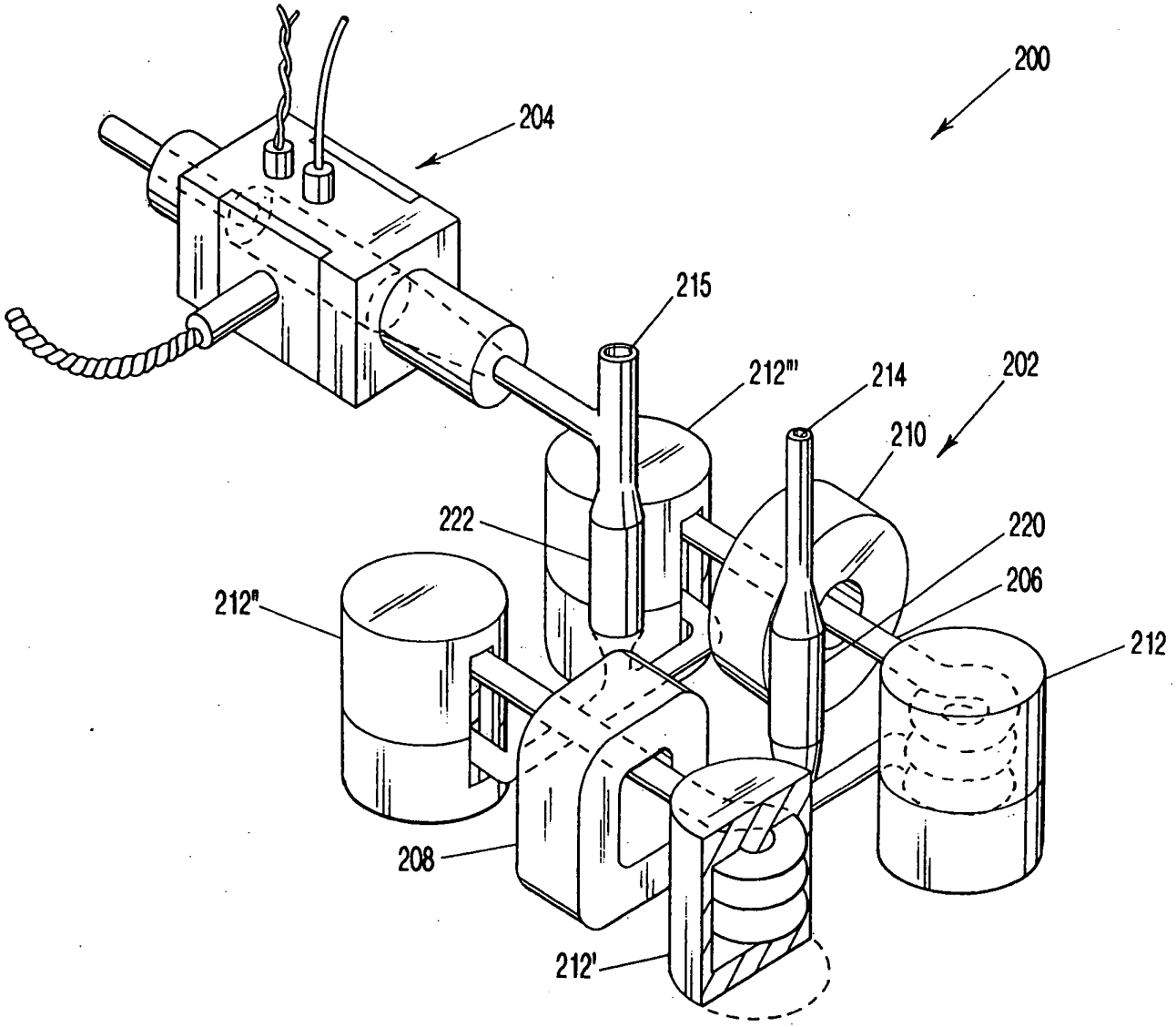


FIG-3

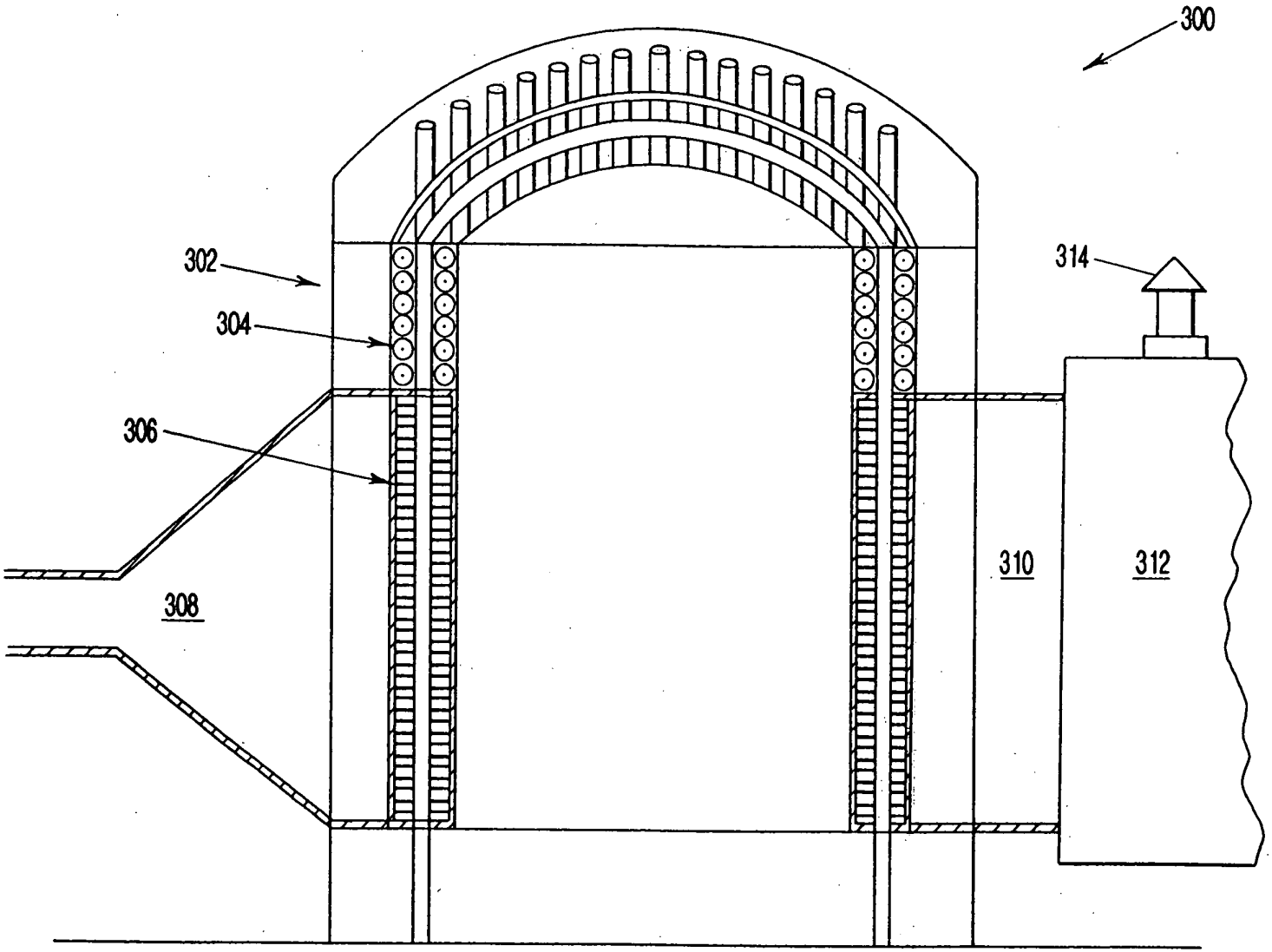


FIG-4

20/220 - 0E09B0T

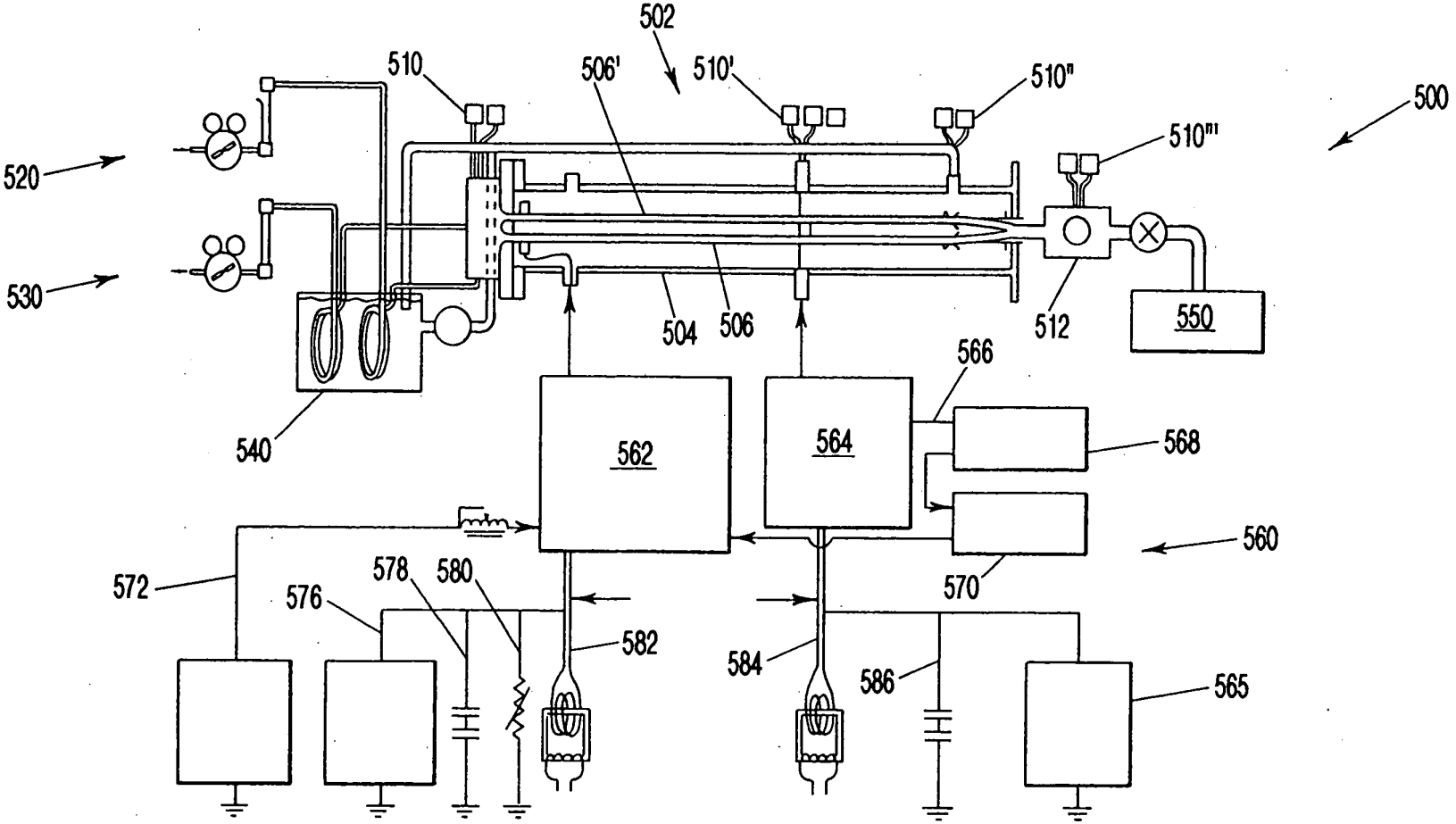


FIG-5

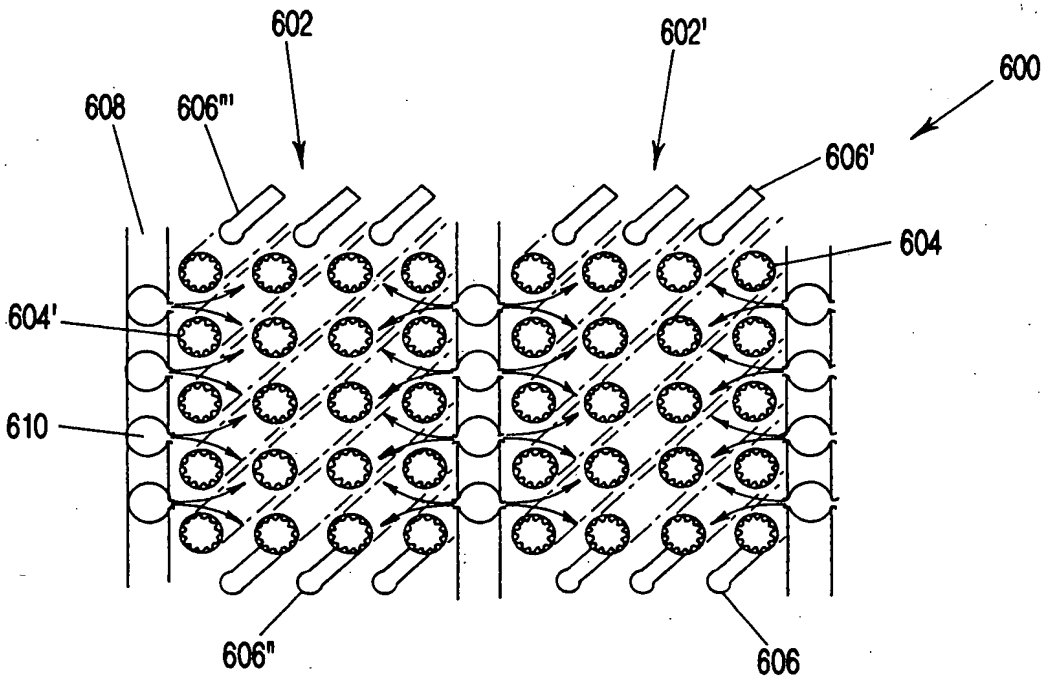


FIG-6a

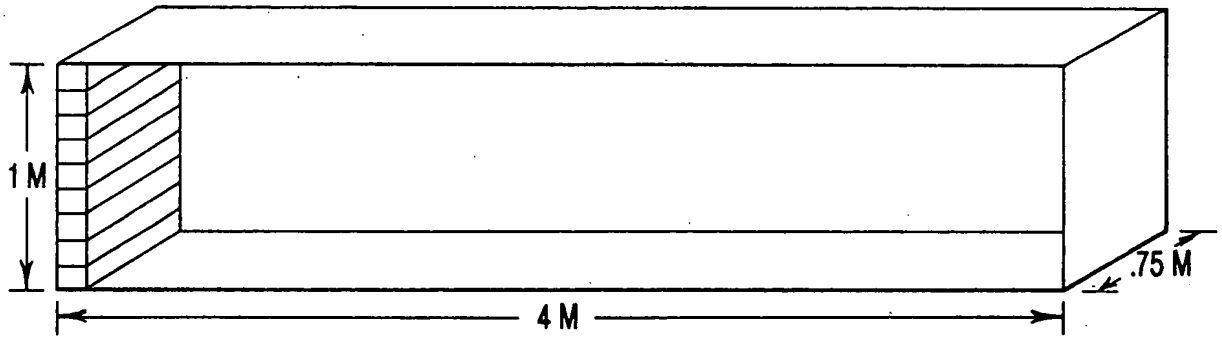
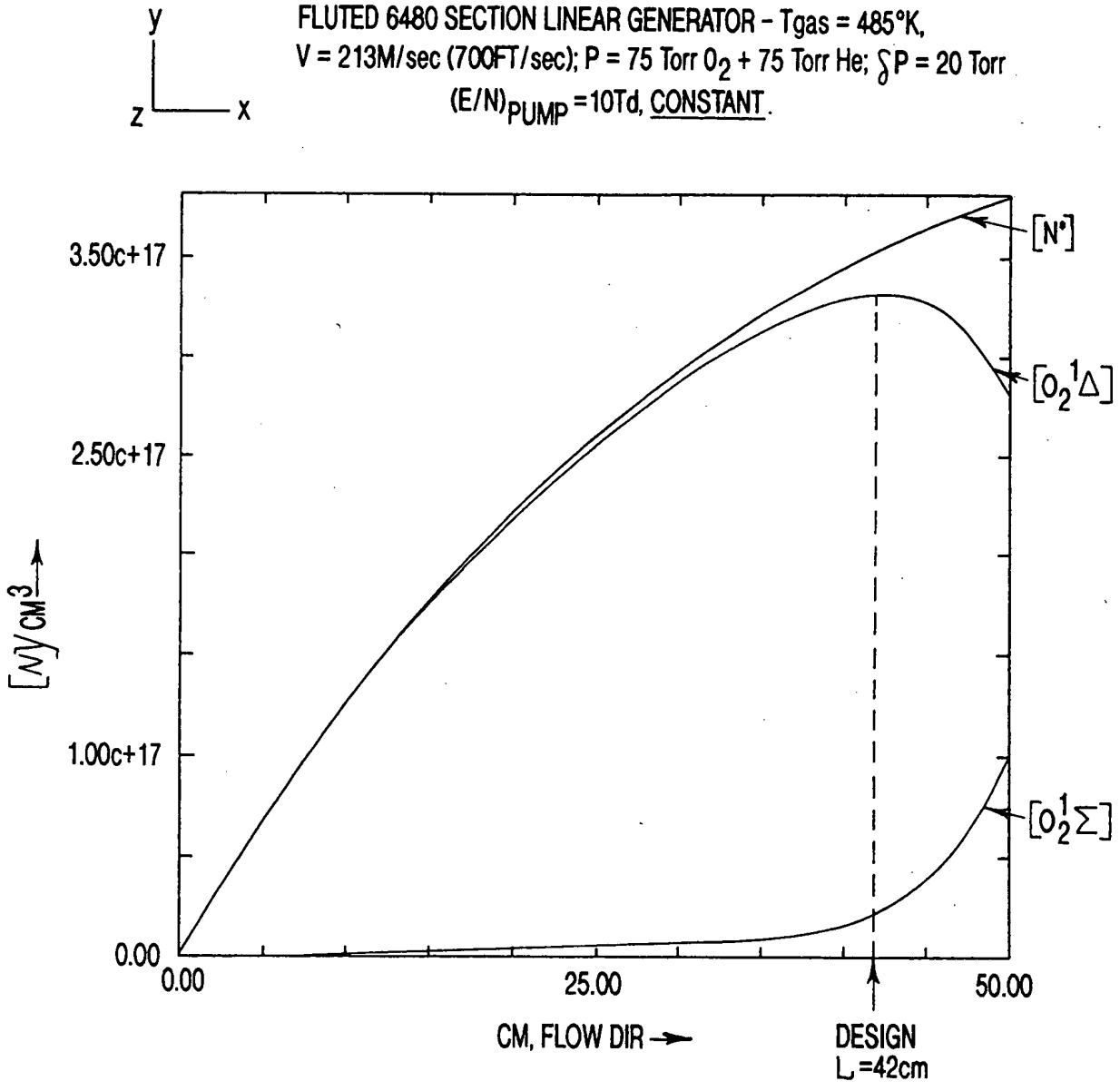


FIG-6b

20250320 050350T



0.00 < x < 50.00
0.00 < y < 3.81c+17

fract $O_2{}^1\Delta/N_{TOTAL}$ = 0.222
fract $O_2{}^1\Delta/O_2$ GND = 0.290
fract $O_2{}^1\Sigma/N_{TOTAL}$ = 0.014

FIG-7

3072320 "0E09800T

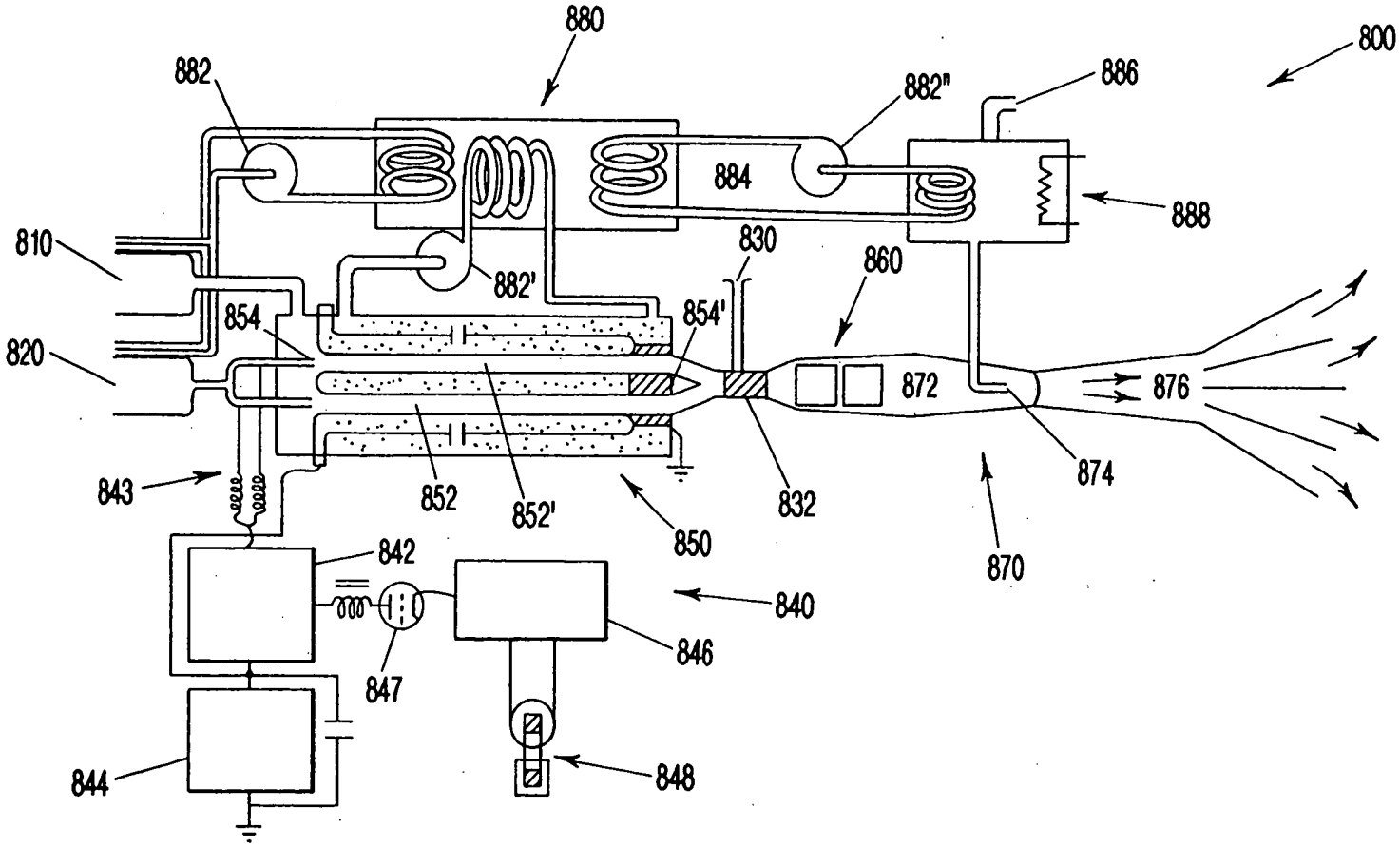


FIG-8a

1008605 "02/20/04

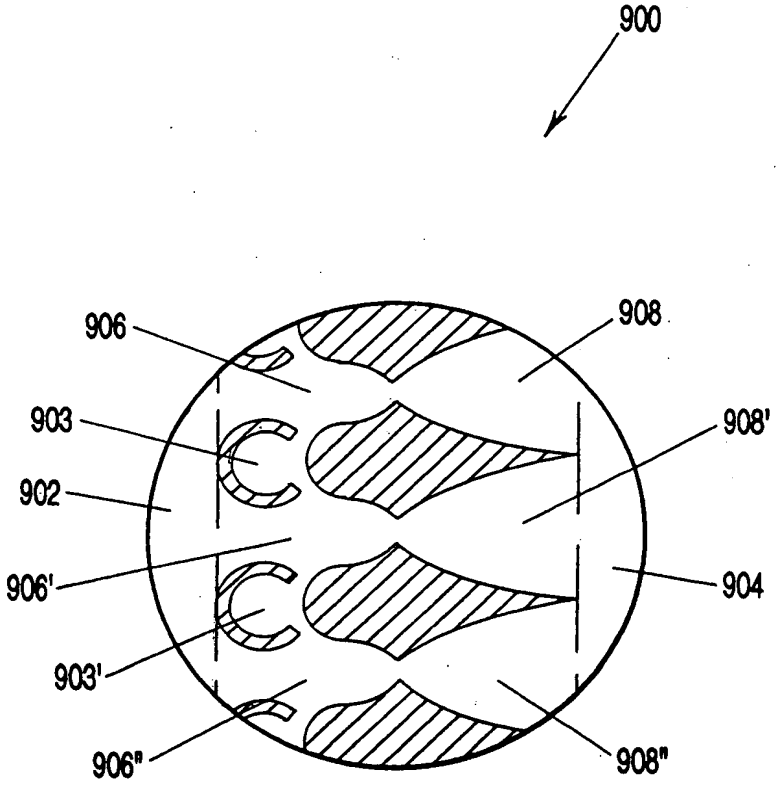


FIG-8b

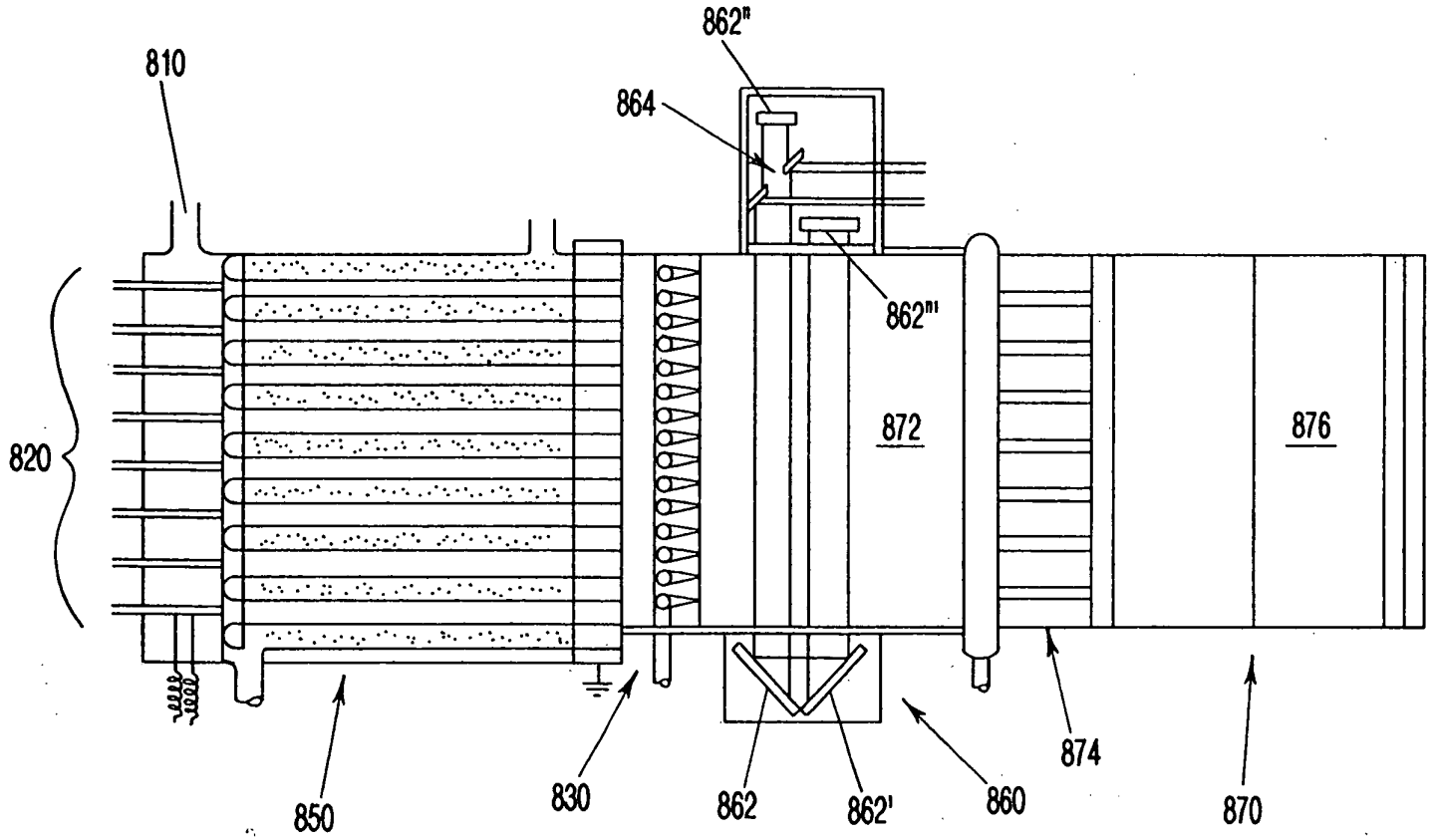


FIG-8c

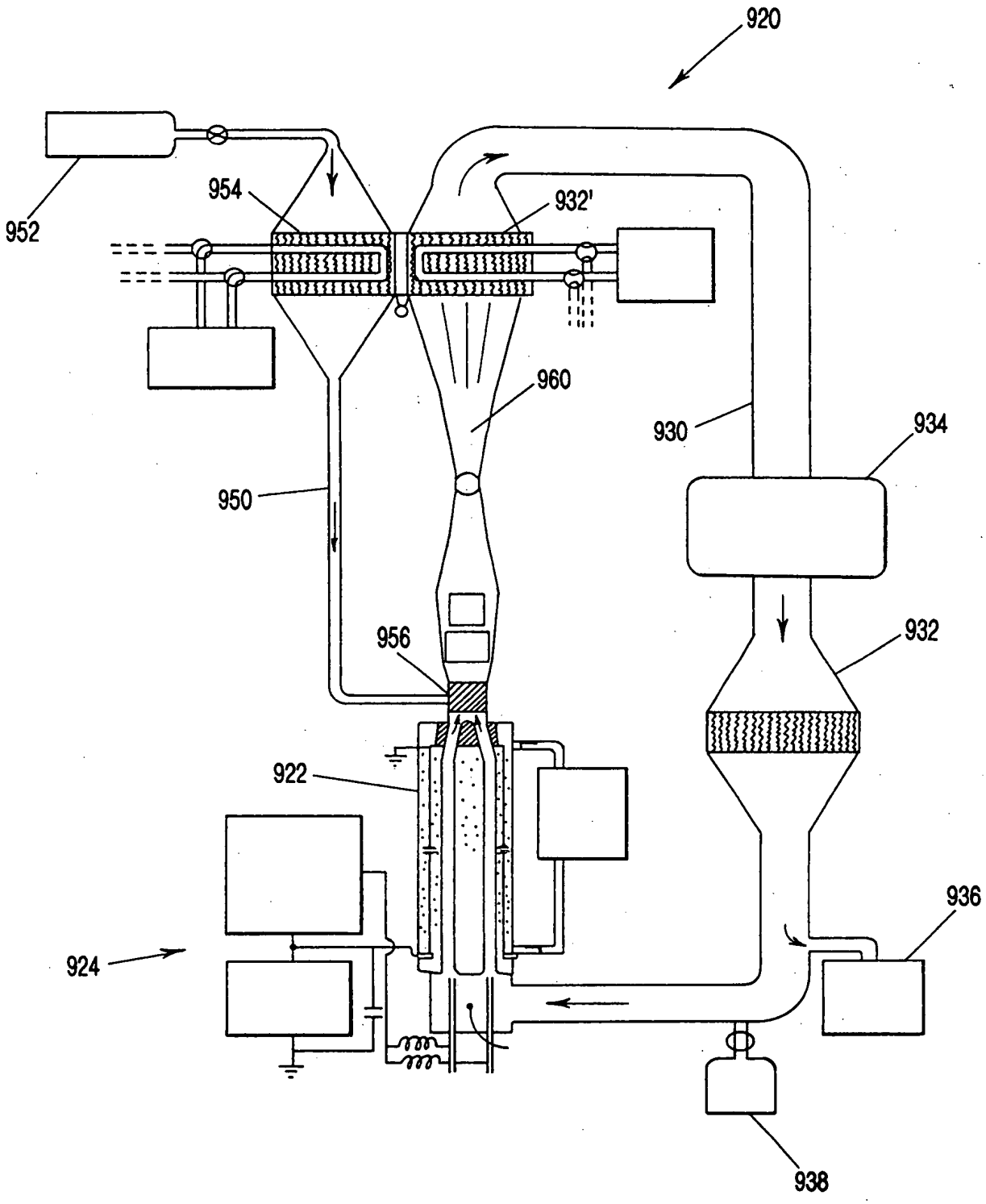


FIG-9

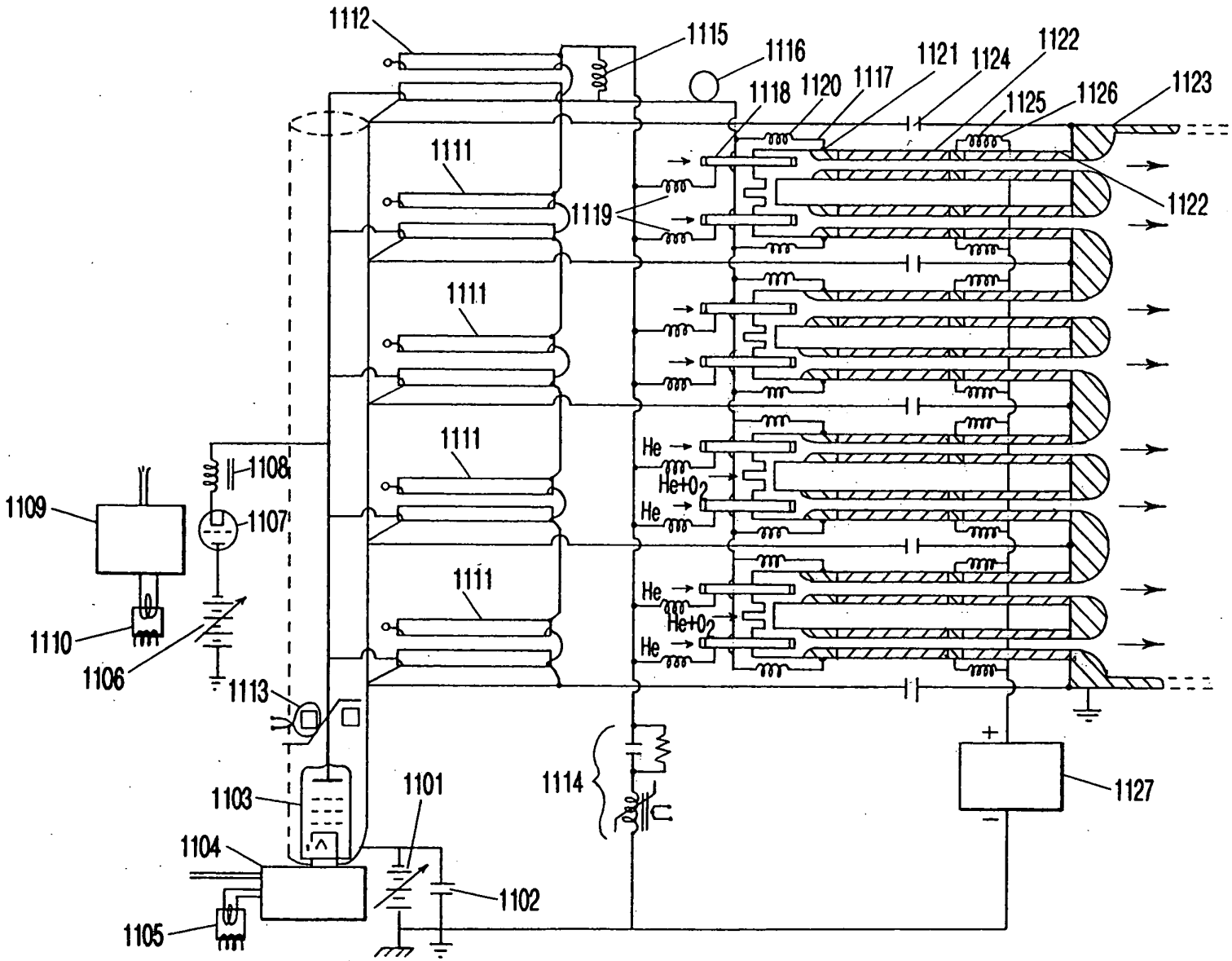

1112
1115
1116
1121
1124
1122
1123
1118
1120
1117
1125
1126
1111
1119
1122
1111
1111
1108
1109
1107
He
He+O2
He
1110
1106
1111
He
He+O2
He
1113
1103
1101
1114
1127
1104
1102
1105

FIG-10

20080320.022702

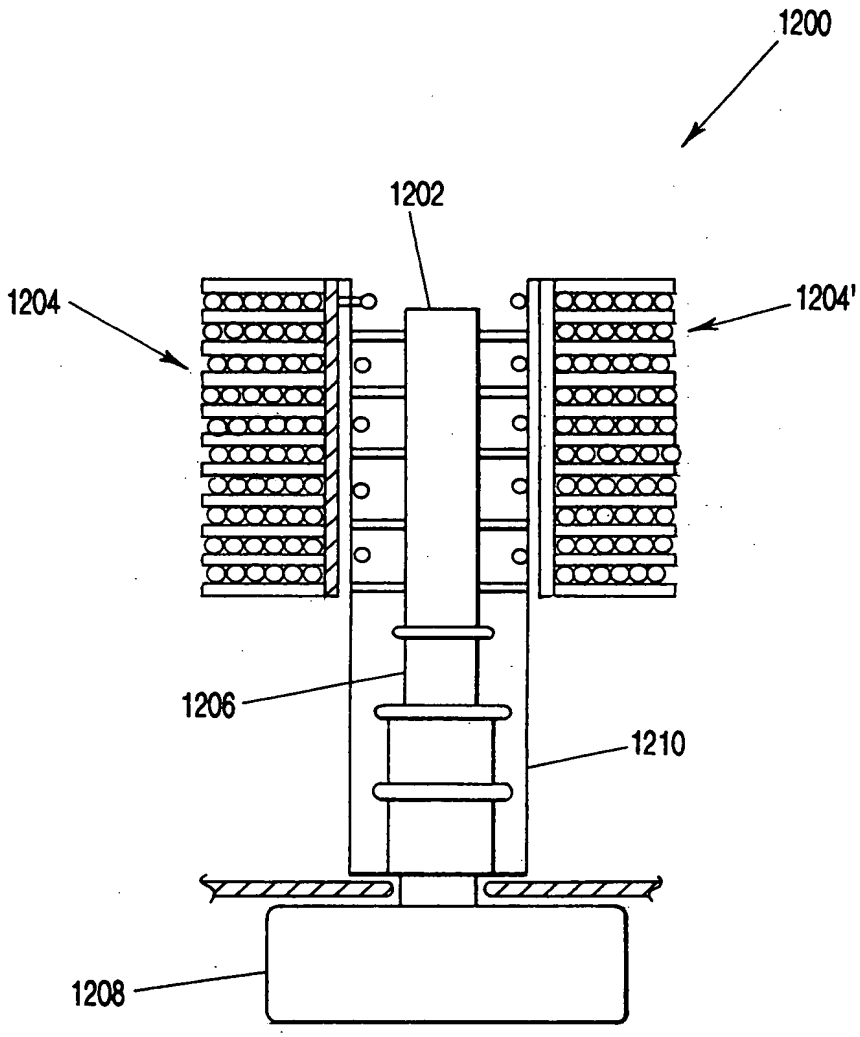


FIG-11

20020020020 4000000

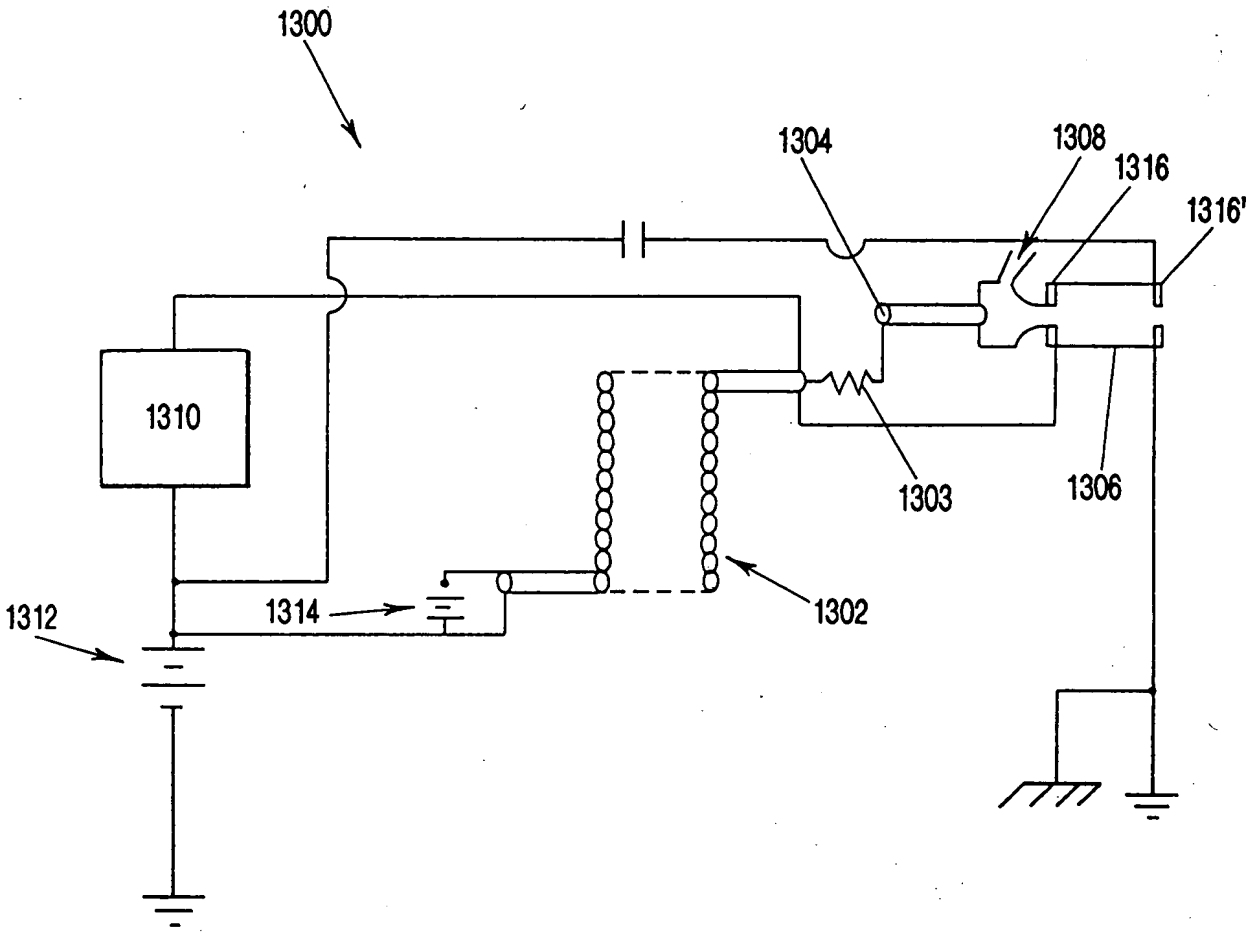


FIG-12

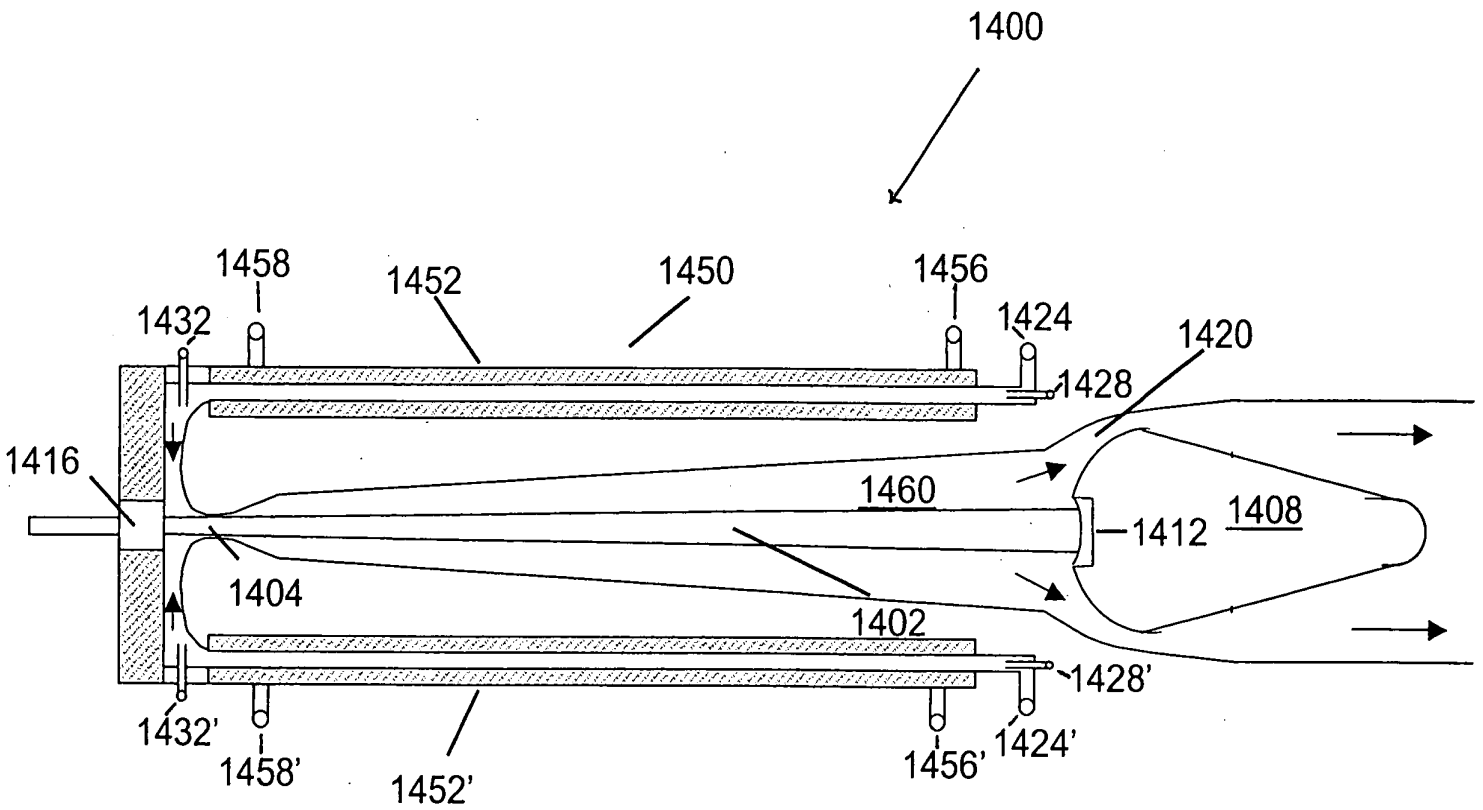

1400
1458
1452
1450
1456
1424
1420
1432
1428
1416
1460
1412
1408
1404
1402
1428'
1432'
1458'
1452'
1456'
1424'

Figure 13

20/220 - 08098007

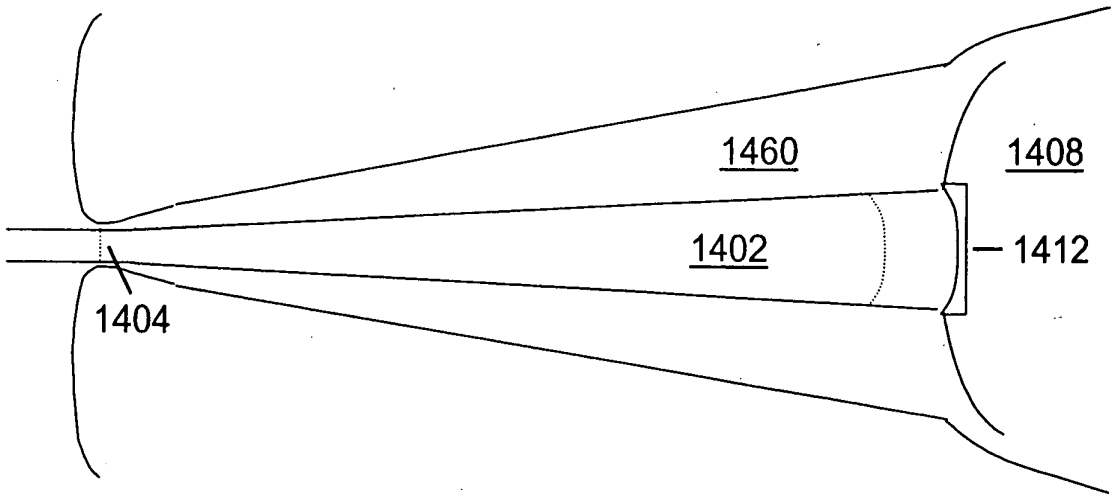


Figure 14